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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,820	04/02/2001	Said El Fassi	P07156US00/RFH	8066

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STITES & HARBISON PLLC
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ALEXANDRIA, VA 22314

EXAMINER

ZIA, SYED

ART UNIT	PAPER NUMBER
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2131

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/822,820	EL FASSI ET AL.	
	Examiner	Art Unit	
	Syed Zia	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to request for reconsideration filed on November 8, 2006. Original application contained Claims 1-9. Applicant previously added new Claims 10-11, and amended Claim 1. Applicant currently amended Claim 1. The amendment filed on November 8, 2006 have been entered and made of record. Therefore, Claims 1-11 are pending for consideration.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 20, 2006 has been entered.

Response to Arguments

Applicant's arguments filed on November 8, 2006 have been fully considered but they are not persuasive because of the following reasons:

Art Unit: 2131

Regarding Claims 1-11 applicants argued that cited prior art [Veil et al. U. S. Patent No. 6,092,202, and Beckert et al. (U. S. Patent 6,862,651)] does not teach, "*both the processor and the computing peripheral of the system process all types of input data codes including any secure input data.*" Applicant argued that the proposed combination is not obvious.

This is not found persuasive. Cited prior art clearly teaches system and method for where an interface interfaces a security coprocessor to a host computer for controlling the vehicles. The interface includes the communication protocol for restricting access by the host computer to the data transmitted through the coprocessor. Secure transaction processing is performed locally in the security coprocessor and non-secure transaction processing is performed in the host computer. The system of cited prior art compute codes for each elementary operation performed by the processor and verify proper operation of all or part of the executed program within the meaning of [sensitive data] that codes (col.11 line 22 to line 44, and col.7 line 1 to line 49). This system provides automatic computer devices for controlling the vehicles, as well as during emergency power shut down in vehicle computer. The hardware and software cooperate to ensure that critical system data is not lost in the event of a power loss thus provides comprehensive control of operation of the vehicle during normal and emergency operation.

In the system of cited prior art (Fig.4, and 6) the data transmitted through the security coprocessor includes sensitive data such as personal and personal identification data. The interface communication protocol is implemented in application programming interface. A trusted input device such as keyboard and keypad is connected to the coprocessor. The input device includes a secure mode indicator for indicating secure mode in response to requests from

Art Unit: 2131

host computer for keyboard entries of sensitive data. Thus, in the system of cited prior art the transactions are protected from unauthorized intrusion.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the proposed system provides automatic computer devices for controlling the vehicles, as well as during emergency power shut down in vehicle computer, where an interface interfaces a security coprocessor to a host computer for controlling the vehicles (Veil: col.7 line 28 to line 49, and col.10 line 61 to col.11 line 8, and Beckert: col.6 line 44 to col.7 line 5)

As a result, the system of cited prior art provides a system and method for a secure computer system as broadly claimed in system.

The examiner is not trying to teach the invention but is merely trying to interpret the claim language in its broadest and reasonable meaning. The examiner will not interpret to read narrowly the claim language to read exactly from the specification, but will interpret the claim language in the broadest reasonable interpretation in view of the specification. Therefore, the examiner asserts that cited prior art does teach or suggest the subject matter broadly recited in independent and dependent claims. Accordingly, rejections for Claims 1-11 are respectfully maintained.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Veil et al (U. S. Patent 6,092,202) as applied to claim 1 above, and further in view of Beckert et al. (U. S. Patent 6,862,651).

1. Regarding Claim 1, Veil teach and describe a computer system (item 100 Fig.4) comprising at least one computer [PC 114] with a processor operating under the control of a program [such as operating system Unix, Windows of Fig.4 item 102] (Col.1 line 26 to line 30), operating on input data items each suitable for being associated with a code [such as basic input/output code] and supplying output data items each suitable for being associated with a code and for being transmitted or applied to output members [Basic I/P, O/P operation, using USB, PS/2 or RS-232 protocol to devices such as smart card item 46 Fig.4] (Col.10 line 54 to line 60), the system being characterized by at least one peripheral external to the processor [i.e. security processor item 122 Fig.4], connected to the processor receive at least the input data codes, the operands, and the nature of the operation for each elementary operation performed by the processor [input device with security circuit] (col.7 line 1 to line 15), the peripheral having secure architecture [Item 104 Fig.4] and the processor and the at least one peripheral [i.e.

Art Unit: 2131

security processor item 122 Fig.4] both processing all types of said input data codes [such as basic input/output code] including any secure input codes, the peripheral computing a code for each elementary operation performed by the processor and verifying proper operation of all or part of the executed program, while the processor performs computations only on the functional values [sensitive data] of the encoded [cryptographic] data, and at least one of (i) said processor and (ii) said at least one peripheral being located on the public transport vehicle or along a wayside for the public transport vehicle. (col.7 line 28 to line 49, and col.10 line 61 to col.11 line 8).

The system disclosed by Veil shows all the features of the claimed limitation, but Veil does not specifically disclose controlling operation of a vehicles.

In an analogous art, Beckert, on the other hand discloses computing environment that relates to method for controlling computing devices of automotive vehicles (col.6 line 44 to line 64).

Therefore, It would have been obvious to one ordinary skilled in the art at the time of invention to combine the teachings of Veil and Beckert, because Beckert 's method of controlling the operation of vehicle would not only extend application of the extended security structure of Veil in the system for running automotive vehicle during receiving data from host computing devices, and this will also provide safeguards and help detect any fault that might cause an incident (col.6 line 66 to col.7 line 5).

Art Unit: 2131

2. Claims 2-3, and 5-9 are rejected applied as above rejecting Claim 1. Furthermore, the system of Veil and Beckert teaches and describes a secure computers system and method (Veil: Fig.4, Fig.6) in which:

As to claim 2, the said program is permanent or downloaded (Veil: col.10 line 47 to line 54).

As to claim 3, the peripheral is single [item 102 Fig.4] and associated with a host computer [item 102 Fig.4] to provide security for all of a system having a plurality of computers connected to a common [item 134 Fig.4] communications medium (Veil: col.7 line 1 to line 7, col.7 line 29 to line 36).

As to claim 5, having a plurality of host computers [item 442 Fig.6], interconnected by a transmission medium [such as network 110 Fig.4] and each provided with a security peripheral (Veil: col.7 line 1 to line 51, and col.10 line 58 to col.11 line 8).

As to claim 6, the security peripheral or the security peripherals [item 104, 122 Fig.4] perform security operations only on the inputs/outputs of only some of the processors [item 442 Fig.6] (Veil: col.9 line 9 to line 15, and col.10 line 61 to line 68).

As to claim 7, having a single security peripheral [item 400 Fig.6], connected to a computation assembly constituted by a central unit processor [item 410 Fig.6] and peripherals [item 414, 416, 436, 438 Fig.6], said security peripheral having computation means (Fig.4) (col.10 line 34 to line 60) that perform: digital security processing [such as RISC based processing of security program] (col.10 line 34 to line 54); and security processing of the inputs/outputs (Veil: col.10 line 47 to line 60).

Art Unit: 2131

As to claim 8, characterized in that said security peripheral [item 400 Fig.6] is designed to make secure an assembly of the system constituted by a smart card [item 436 Fig.6], a reader [item 436, 414 Fig.6], and one or more computers involved in the processing [item 442 Fig.6], and constituting the system, and to generate the interchanges between the smart card [item 436 Fig.6] and the computers [item 442 Fig.6] (Veil: col.11 line 9 to line 44).

As to claim 9, the security peripheral is an ASIC [such as application specific hardware] (Veil: col.7 line 19 to line 28).

As to claim 10, the computer system automatically controls operation of a public transport vehicle (Beckert: col.6 line 44 to line 64, and Veil: (col.7 line 28 to line 49, and col.10 line 61 to col.11 line 8).

As to claim 11, the at least one peripheral controls whether the processor itself is processing information input thereto in a secure way independently of whether the input information processed by the processor is secure information (Veil: col.7 line 28 to line 49, and col.10 line 61 to col.11 line 8).

3. Claim 4 is rejected applied as above rejecting Claim 3. Furthermore, the system of Veil and Beckert teaches and describes a a secure computers system and method (Veil: Fig.4, Fig.6) in which:

The host computer is fitted with a safety driver [item 120 Fig.4], which enables it to dialog with the peripheral and with the other computers (Veil: col.8 line 65 to col.9 line 15, and col.10 line 54 to line 60).

Art Unit: 2131

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Zia whose telephone number is 571-272-3798. The examiner can normally be reached on 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SZ
January 3, 2007

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PRIMARY EXAMINER
AM 1/3/07